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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/043,936 | 01/11/2002 | Michael Mulligan | NOKM.015CIP | 9432 |
| 7590 | 10/07/2005 | | EXAMINER | |
| Hollingsworth & Funk, LLC Suite 125 8009 34th Avenue South Minneapolis, MN 55425 | | | DOAN, DUYEN MY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2143 | |

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|-----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/043,936 | MULLIGAN ET AL. |
| | Examiner | Art Unit |
| | Duyen M. Doan | 2143 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 August 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-40 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/17/02, 5/28/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

Detail Action

Claims 1-40 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-17, 18-23, 25-29, 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi (us pat 6829474) in view of Rosenberg et al (us 20030013434) (hereinafter Rosenberg).

As regarding claim 1, Adachi disclosed one or more terminals operable in a network (see Fig.1, terminal 5); a network infrastructure comprising one or more network systems (see Figure 1); and at least one network service broker comprising a loosely-coupled interface exposed to the service provision infrastructure for brokering added-value network services from one or more of the terminals and network systems to the service provision infrastructure (col.2, lines 24-41, value added servers). Adachi

did not expressly disclose at least one network-enabled application operating within a service provision infrastructure for use by one or more of the terminals.

Rosenberg taught at least one network-enabled application operating within a service provision infrastructure for use by one or more of the terminals (Rosenberg pg.2, par 17, service provider).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Rosenberg in the system of Adachi to have network application operating within a service provision infrastructure for use by one or more of the terminals because both inventions taught providing services to the terminal users.

A person with ordinary skill in the art would have been motivated to combine the teaching of Rosenberg to the system of Adachi because having the provision application for use by one or more of the terminals would provide users with various services and allow user to interact with the service provider for services (see Rosenberg pg.2, par 19).

As regarding claim 2, Adachi-Rosenberg disclosed the loosely-coupled interface is a loosely-coupled standardized interface (see Adachi col.2, lines 24-34, browser).

As regarding claim 4, Adachi-Rosenberg disclosed the loosely-coupled interface comprises a Web Service interface (see Adachi col.2, lines 24-34)

As regarding claim 5, Adachi-Rosenberg disclosed a single loosely-coupled Web Service interface exposed to the service provision infrastructure (see Adachi col.2, lines 42-45).

As regarding claim 6, Adachi-Rosenberg disclosed the network service broker comprises at least one network-coupled broker to communicate with one or more network elements in the network infrastructure (col.2, lines 24-41, value-added servers).

As regarding claim 7, Adachi-Rosenberg disclosed at least one terminal-coupled broker to communicate with one or more terminals (see Adachi, Figure 1, one or more value added servers provide services to terminal).

As regarding claim 8, Adachi-Rosenberg disclosed at least one hybrid network service broker to communicate with one or more network elements in the network infrastructure and with one or more terminals (see Rosenberg, pg.6, par 71).

As regarding claim 9, Adachi-Rosenberg disclosed the network service broker is an authentication broker to access authentication services for use by the network-enabled application (see Rosenberg pg.2, par 22, 24).

As regarding claim 10, Adachi-Rosenberg disclosed the network service broker is a charging broker to access a charging/billing service in connection with use of the network-enabled application (see Rosenberg pg.2, par 24).

As regarding claim 11, Adachi-Rosenberg disclosed the network service broker is a location broker to access a terminal location service to allow a location of the terminal to be provided to the network-enabled application (see Rosenberg pg.2, par 19).

As regarding claim 12, Adachi-Rosenberg disclosed the network service broker is a content ordering broker to store subscription information to a profile register and to verify subscription intentions of an end-user of the terminal (see Rosenberg pg.2 par 25, pg.4, par 57).

As regarding claim 13, Adachi-Rosenberg disclosed the network service broker is a presence broker to access a presence service to allow user presence information to be provided to the network-enabled application (see Rosenberg pg.2, par 19).

As regarding claim 14, Adachi-Rosenberg disclosed the network service broker is a client provisioning broker to broker provisioning of mobile terminals (see Rosenberg pg.2, par 17-19).

As regarding claim 15, Adachi-Rosenberg disclosed the network service broker is a notification broker to facilitate pushing content to the terminals (see Rosenberg pg.2, par 21).

As regarding claim 16, Adachi-Rosenberg disclosed the network service broker is a privacy broker to access end-user privacy information and to control which information other brokers will provide to the service provision (see Rosenberg pg.4, par 55).

As regarding claim 17, Adachi-Rosenberg disclosed the privacy broker controls which information other brokers will provide to the service provision infrastructure based on parameters defined by an end-user of the terminal, wherein the parameters may be provided by the end-user manually at a time in which the end-user privacy information is required, or automatically where the parameters were defined by the end-user in advance (see Rosenberg pg.4, par 55-56).

As regarding claims 18-23, 25-29, the limitations are similar to claims 1-2, 4-17, therefore rejected for the same rationale as claims 1-2, 4-17.

As regarding claims 30-33, the limitations are similar to claims 1-2, 4-17, therefore rejected for the same rationale as claims 1-2, 4-17.

Claims 3, 24, 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi (us pat 6829474) and Rosenberg et al (us 20030013434) (hereinafter Rosenberg) as applied to claim 1 above, further in view of Hagirahim et al (us 2002/0254642), (hereinafter Hagirahim).

As regarding claims 3,24, Adachi and Rosenberg disclosed all limitations in claim 1 and 8 above, but did not expressly disclose the loosely-coupled standardized interface is defined in Extensible Markup Language (XML).

Hagirahim taught the loosely-coupled standardized interface is defined in Extensible Markup Language (XML) (see Hagirahim pg.2-3, par 18).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Hagirahim in the system of Adachi and Rosenberg to use XML as a mark-up language for the interface, because XML allow secure transfer over the Internet.

As regarding claim 34, Adachi and Rosenberg disclosed the service broker (see Adachi figure 1, value added servers), service broker loosely-coupled interface to the service provision infrastructure to facilitate communication (see Rosenberg, pg.2, par 17, 19, service provider provide provisioning services to clients), facilitating access by service provision infrastructure to the service functionality available from the visited

network via a loosely-coupled interface of visited network service broker that is exposed to the service provision infrastructure (see Rosenberg, pg.6, par 70-71, the third party other than the service provider equivalent to the visited network service broker), the combinations of Adachi and Rosenberg did not expressly disclose providing a use authorization voucher to a visited network service broker associate with the visited network, accessing the visited network service broker by service provision infrastructure using the address of the visited network service broker

Hagirahim taught providing a use authorization voucher to a visited network service broker associate with the visited network (see pg.2, par 15-17), accessing the visited network service broker by service provision infrastructure using the address of the visited network service broker (see pg.2, par 15-17).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Hagirahim in the system of Adachi and Rosenberg to providing a use authorization voucher to a visited network service broker associate with the visited network, accessing the visited network service broker by service provision infrastructure using the address of the visited network service broker because letting the user terminal access the visited network broker would allow user to access services that are not owned by the service provider and the visited broker serve the terminals when the terminal is roaming (see Hagirahim pg.2, par 15).

As regarding claim 35, Adachi-Rosenberg-Hagirahim disclosed providing the use voucher to the visited network service broker comprises providing the use voucher to the service provision infrastructure via the loosely-coupled interface of the home

network service broker, and in turn providing the use voucher to the visited network service broker via the loosely-coupled interface of the visited network service broker (see Hagirahim pg.2, par 1-17).

As regarding claim 36, Adachi-Rosenberg-Hagirahim disclosed providing the use voucher to the visited network service broker comprises directly providing the use voucher from the home network service broker to the visited network service broker (see Hagirahim pg.2, par 15, pg.3, par 21, 28).

As regarding claim 36, Adachi-Rosenberg-Hagirahim disclosed providing a use authorization voucher to the visited network service broker comprises providing the use authorization voucher to the visited network if a roaming agreement between the home and visited networks authorizes providing the use authorization voucher to the visited network (see Hagirahim pg.2, par 15, pg.3, par 21, 28).

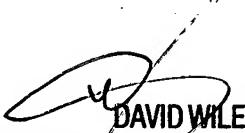
As regarding claims 37-40, the limitations are similar to claims 34-36, therefore rejected for the same rationale as claims 34-36.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 571 272 3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Duyen Doan
Art unit 2143

DD



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